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10/657,005	09/05/2003	Ronald N. Caron	6113-000026/US	1736
28997	7590	08/07/2007		
HARNES, DICKEY, & PIERCE, P.L.C			EXAMINER	
7700 BONHOMME, STE 400			IP, SIKYIN	
ST. LOUIS, MO 63105				
			ART UNIT	PAPER NUMBER
			1742	
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			08/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/657,005  
Filing Date: September 05, 2003  
Appellant(s): CARON ET AL.

**MAILED**  
**AUG 07 2007**  
**GROUP 1700**

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Kevin M. Pumm  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 23, 2007 appealing from the  
Office action mailed February 23, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2001181759	NIPPON MINING CO	7-2001
09263864	KOBE STEEL CO., LTD.	10-1997

2002038246                      FURUKAWA ELECTRIC                      2-2002  
CO LTD

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim Rejections - 35 USC § 103**

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Appellant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 2001181759 (PTO-1449).

JP 2001181759 discloses Cu based alloy composition (claim 2) and tensile and electrical conductivity (Table 2). JP 2001181759 does not disclose tensile property as yield strength as recited in claim 1. But, tensile strength and yield strength for Cu electrical alloys are about the same because of the spring property. As stated in *In re Peterson*, 315 F.3d 1325, 1329-30, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003), that "A

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prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art". Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. Also see MPEP § 2131.03 and § 2123.

Claims 5-7 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 09263864 or JP 2002038246 (both are in PTO-1449).

Cited references disclose Cu based alloy composition in their abstracts. The Cu based alloy compositions of cited references overlap the claimed Cu based compositions. As stated in *In re Peterson*, 315 F.3d 1325, 1329-30, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003), that "A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art". Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. Also see MPEP § 2131.03 and § 2123.

#### **(10) Response to Argument**

Appellant's arguments filed May 23, 2007 have been fully considered but they are not persuasive. Below is a Table listed alloys of appealed claims and cited references.

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Wt. %	Appealed Claim 1	JP 2001-181759 Claim 2	Appealed Claim5	JP09263864 Abstract	JP2002038246 abstract
Ti	0.35-5	X	0.35-2.5	0.01-1	$\leq 1$
Ni	y	X	0.5-5	0.01-4	$\leq 10$
Fe	y	X	0.5-1.5	0.01-3	$\leq 3$
Mg	y	0.05-0.2	0.01-1	0.01-1	$\leq 1$
Cr	y	X	$\leq 1$	0.01-1.5	$\leq 1$
Zr	y	X	$\leq 1$	0.01-1	$\leq 0.5$
Ag	y	X	$\leq 1$	0.01-1	$\leq 1$
Cu	bal	Bal	bal	bal	Bal
IACS %	$50 \leq$	52 (Table 2, No. 10)	---		
Yield strength	105ksi or 724 MPa $\leq$	725 MPa tensile strength (Table 2, No. 10)	---		

Y=0.001-10 wt. %

Total amount of X =0.005-2 wt. %

Appellants' argument in instant brief, page 5 of 21, first paragraph is noted. But, because examples of cited reference do not disclose the claimed properties that is not a showing of criticality of claimed composition. Examples of the cited reference are given by way of illustration and not by way of limitation.

Appellants' argument in instant brief, page 5 of 21, second paragraph is noted. But, contrarily to appellants' argument, alloy No. 10, in Table 2 of JP '759, does not contain Ti, but the tensile strength and electrical conductivity meet the claimed requirement. Thus, alloy No. 10 has shown that Ti is not essential to obtain the claimed tensile property and electrical conductivity.

~~and electrical conductivity.~~ Moreover, JP 2001181759 also fails to disclose or suggest a Copper alloy having the claimed range of Titanium of .35 to 2.5%, and the claimed range of Nickel of 0.5 to 5.0 %, which the Appellant believes to be required to achieve the unexpected improved combination of yield strength and electrical conductivity. (see Alloy J347 in Tables 1-3, for example). „

Appellants argue that “

But, appellants' attention is directed to claim 2 of JP '759 pasted below:

[Claim 2] A copper alloy for electronic materials of superior strength, electric conductivity and surface characteristics characterized in that it contains 1.5 to 4.0% Ni, 0.30 to 1.2% Si and 0.05 to 0.20% Mg, that it contains a total amount of 0.005 to 2.0% of one or more of the following elements: Zn, Sn, Fe, Ti, Zr, Cr, Al, P, Mn, Ag or Be, that is prepared so that it has weight ratios of Ni/Si = 3-7 and Si/Mg  $\leq$  8.0, that the balance is Cu and unavoidable impurities, and that the ratio of the Mg peak intensity to the Si peak intensity of the Auger electron spectrum in the outermost surface of the material after the final treatment is greater than 1.0.

that claimed Ni and

Ti have disclosed. Moreover, unexpected results must be established by factual evidence, not “believes”. Comparison must be done under identical condition except for the novel features of the invention. In re Brown, 173 USPQ 685 and In re Chapman, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. In re Clemens, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). The scope of the showing must be commensurate with the scope of the claims. MPEP §

716.02(d), *In re Tiffin*, 448 F.2d 791, 792 (Fed. Cir. 1971), *In re Coleman*, 205 USPQ 1172, *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and *In re Greenfield*, 197 USPQ 227.

Appellants' argument of criticality with respect to J347 in page 8 of instant remarks is noted. But, claim 5 contains more than just Ti-Ni-Cu elements. Moreover, there is no showing that alloys contain one of Ni and/or Ti or outside the claimed ranges would not possess claimed properties. Comparison must be done under identical condition except for the novel features of the invention. *In re Brown*, 173 USPQ 685 and *In re Chapman*, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). The scope of the showing must be commensurate with the scope of the claims. MPEP § 716.02(d), *In re Tiffin*, 448 F.2d 791, 792 (Fed. Cir. 1971), *In re Coleman*, 205 USPQ 1172, *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and *In re Greenfield*, 197 USPQ 227.

Appellants' argument in pages 9-11 of instant brief is noted. But, the transitional expression "consisting essentially of" does not exclude any element disclosed by cited references.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.



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Respectfully submitted,

S. Ip

Conferees:

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